REMARKS

This is intended as a full and complete response to the Final Office Action dated June 1, 2006, having a shortened statutory period for response set to expire on September 1, 2006.

Claims 1-27 remain pending in the application and are shown above. Claims 25-27 are rejected by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Allowable Subject Matter

Applicants acknowledge and appreciate that claims 1-24 are indicated as being allowable.

Claim Rejections - 35 U.S.C. § 103

Claims 25-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamate et al. (2003/0234921, hereinafter Yamate). In response, Applicant respectfully traverses the rejection.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143.

The present rejection fails to establish at least the third criteria. For example, Yamate fails to teach, disposed in a single interrogator, a point sensing circuit for resolving a wavelength of signals reflected from the Bragg grating sensor and a distributed sensing for resolving a difference in frequency between a pulsed signal provided by the laser and a backscattered signal, as recited in claim 25. As the Examiner states in the Office Action, Yamate does not disclose a point sensing circuit and distributed sensing circuit, particularly, a point sensing circuit and distributed sensing circuit having the claimed functionality.

Accordingly, Applicant submits that independent claim 25, as well as those claims that depend therefrom, are allowable and respectfully requests withdrawal of this rejection.

Conclusion

The references cited by the Examiner, alone or in combination, do not teach, show or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,

Randol W. Read

Registration No. 43,876 PATTERSON & SHERIDAN, L.L.P. 3040 Post Oak Blvd. Suite 1500

Houston, TX 77056 Telephone: (713) 623-4844 Facsimile: (713) 623-4846

Attorney for Applicant